

What is claimed is:

1. An image capture device comprising:

a plurality of pixel sensors;

a plurality of timers individually coupled with at least some of said pixel sensors;

5 a plurality of intensity comparators coupled with said timers and said at least some of
said pixel sensors; and

a flash coupled with said timers, wherein said timers are started when said flash fires,
and said timers are independently stopped based on an increase in brightness of
said at least some of said pixel sensors from said flash determined by said
10 intensity comparators.

2. An image capture device as recited in claim 1 further comprising:

a first memory coupled with said plurality of timers wherein said first memory stores
delay data from at least some of said plurality of timers.

3. An image capture device as recited in claim 2 further comprising:

15 a converter coupled with said first memory and a third memory, wherein said
converter receives said delay data from said first memory and stores distance data
in said third memory.

4. An image capture device as recited in claim 1 further comprising:

20 a second memory coupled with said plurality of pixel sensors wherein said second
memory stores image data from at least some of said plurality of pixel sensors.

5. An image capture device as recited in claim 1 wherein said flash uses infrared
wavelengths of light.

6. An image capture device comprising:

a plurality of pixel sensors;

25 a plurality of timers individually coupled with at least some of said pixel sensors;

a plurality of intensity comparators coupled with said timers and said at least some of
said pixel sensors; and

an electrical connection for an external flash coupled with said plurality of timers,

wherein said timers are started when said external flash fires, and said timers are

5 independently stopped based on an increase in brightness of said at least some of
said pixel sensors from said flash determined by said intensity comparators.

7. An image capture device as recited in claim 6 further comprising:

a first memory coupled with said plurality of timers wherein said first memory stores
delay data from at least some of said plurality of timers.

10 8. An image capture device as recited in claim 7 further comprising:

a converter coupled with said first memory and a third memory, wherein said
converter receives said delay data from said first memory and stores distance data
in said third memory.

9. An image capture device as recited in claim 6 further comprising:

15 a second memory coupled with said plurality of pixel sensors wherein said second
memory stores image data from at least some of said plurality of pixel sensors.

10. An image capture device as recited in claim 6 wherein said flash uses infrared
wavelengths of light.

11. A method for capturing three-dimensional data with a digital imaging system

20 comprising the steps of:

- a) initializing a plurality of timers associated with a plurality of pixel sensors;
- b) initializing a plurality of intensity comparators associated with said pixel sensors
and said timers with an initial intensity from said pixel sensors;
- c) firing a flash and starting said timers;

- d) comparing intensity of said pixel sensors with said initial intensity and stopping the timers associated with said pixel sensors that have detected said flash; and
- e) repeating step c) until a timeout is reached.

12. A method for capturing three-dimensional data with a digital imaging system as recited in claim 11 further comprising the step of:

- f) storing timing data from said plurality of timers in a first memory.

13. A method for capturing three-dimensional data with a digital imaging system as recited in claim 12 further comprising the steps of:

- g) converting said timing data into distance data; and

- h) storing said distance data in a third memory.

14. A method for capturing three-dimensional data with a digital imaging system as recited in claim 11 further comprising the step of:

- e) storing image data from said plurality of pixel sensors in a second memory.

15. An image capture device comprising:

- means for capturing light intensity values of pixels;
- means for firing a flash to light an object;
- means for comparing light intensity values of pixels; and
- means for timing how long it takes light from flash to reflect from said object to said means for capturing light intensity values as determined by said means for comparing light intensity values of pixels;

16. An image capture device as recited in claim 15 further comprising:

- means for storing results from said means for timing.

17. An image capture device as recited in claim 16 further comprising:

- means for converting results from said means for timing to distance data.

18. An image capture device as recited in claim 17 further comprising:

means for storing said distance data.

19. An image capture device as recited in claim 18 further comprising:

means for storing image data from said means for capturing light intensity values.

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